12928 - Gaseous outflows from low mass galaxies: Understanding local laboratories for high redshift star formation

Cycle: 20, Proposal Category: GO

(Availability Mode: SUPPORTED)

INVESTIGATORS

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VISITS

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
01	(1) GP0303-0759	COS/FUV COS/NUV	3	03-Jul-2012 22:56:18.0	yes
02	(2) GP1244+0216	COS/FUV COS/NUV	4	03-Jul-2012 22:56:34.0	yes
03	(3) GP1133+6514	COS/FUV COS/NUV	3	03-Jul-2012 22:56:49.0	yes
04	(4) GP1054+5238	COS/FUV COS/NUV	2	03-Jul-2012 22:57:04.0	yes
05	(5) GP1424+4217	COS/FUV COS/NUV	2	03-Jul-2012 22:57:18.0	yes

Visit	*Targets used in Visit*	*Configurations used in Visit*	*Orbits Used*	*Last Orbit Planner Run*	*OP Current with Visit?*
06	(6) GP1249+1234	COS/FUV COS/NUV	4	03-Jul-2012 22:57:34.0	yes
07	(7) GP1219+1526	COS/FUV COS/NUV	2	03-Jul-2012 22:57:46.0	yes
08	(8) GP1137+3524	COS/FUV COS/NUV	2	03-Jul-2012 22:57:58.0	yes
09	(9) GP0911+1831	COS/FUV COS/NUV	4	03-Jul-2012 22:58:11.0	yes

26 Total Orbits Used

ABSTRACT

The evolution of galaxies and the intergalactic medium is undoubtedly affected by starburst-driven outflows. These galactic winds are responsible for regulating the growth of galaxies, as well as enriching the intergalactic medium with metals. To date, our understanding of outflows at early cosmic times is based strictly on features in the ultraviolet spectra of galaxies. For these high redshift objects, detailed analyses are often hampered by extreme distances. Therefore, we propose COS spectroscopy of a sample of nine local dwarf starburst galaxies. These objects, selected from their high equivalent width nebular line emission in the SDSS (i.e. the "Green Peas"), are some of the most active star-forming dwarfs in the local universe. With lower masses and metallicities than other nearby starbursts, these galaxies may represent the best high redshift analogs that can be found locally. The proposed observations will measure galactic winds and mass loss, and determine how the outflows scale with other galaxy properties. Furthermore, COS spectroscopy will constrain the dust content and elemental abundances in the ISM, as well as the covering fraction of the outflowing gas and its role in regulating the escape of Lyman alpha and hydrogen-ionizing photons. By comparing these observations to higher redshift samples, we will clarify the relation between these local analogs and their high redshift counterparts. These data will provide a lasting legacy for HST and COS, as existing samples of local high redshift analogs with quality UV spectra remain small.

OBSERVING DESCRIPTION

We will obtain FUV spectra of nine compact, actively star-forming galaxies at z~0.2. The goal of these observations is to measure interstellar absorption lines in both metals and the hydrogen Lyman series.

We have opted for an ACQ/IMAGE acquisition. As a bonus, this method will provide the first high-resolution images of these galaxies. In order to determine the required exposure time, we assume that the galaxies have 1" diameters (as they are unresolved in SDSS images). The ACQ/IMAGE dwelltime is calculated by assuming a uniform surface brightness. For both the target acquistion and the science exposures (described below), we use the primary science aperture (PSA), and Mirror A.

The science exposures are taken in both G130M and G160M, so that we can measure a wide range of absorption and emission features. Our exposure times are determined by the requirement for sufficient continuum S/N to measure absorption lines. We estimate that our effective spectral resolution will be around 100 km/s for galaxies with 1" diameters. We aim to achieve a S/N of 10 per 100 km/s, which corresponds to a S/N of 3.8 per native (point source) spectral resolution element adopted by the ETC. In G130M, we calculate the exposure time to meet this requirement at a wavelength of 1400A. Since the sensitivity curve is relatively flat for G130M, we expect to achieve adequate S/N over the entire bandpass. For G160M, we aim to meet our sensitivity threshold at the observed wavelength of CII 1334. The redder SiIV 1393, 1403 lines that we aim to detect are relatively strong and will be adequately detected with the continuum S/N of 7-8.

With the exception of one galaxy, observations are made with only one CENWAVE per grating. While this choice leaves gaps in the spectra, it greatly reduces overheads and simplifies data reduction. We have carefully examined FUV line lists from Grimes et al. (2009) and Leitherer et al. (2011) to avoid placing potentially interesting features in the gaps. In one case (GP 1054+5238), we have opted for two CENWAVEs in the G130 grating. This option was necessary to cover the OVI 1032 line and the Lyman Continuum (which is reached for this galaxy as well as GP1249+1234 and GP0911+1831).

Following the reccomendations in the COS instrument handbook, spectroscopic observations are made at all four FP-POS settings, in TIME-TAG mode. Since the buffer time estimated by the COS spectroscopic ETC is much longer than the exposure time, we have entered a buffer time that is equivalent to the exposure time. In some cases, we have slightly reduced the overhead by making the buffer time 100 seconds less than the exposure time (COS IHB 5.4.1).

Visit

Proposal 12928, Visit 01, implementation Wed Jul 04 02:58:21 GMT 2012

Diagnostic Status: Warning

Scientific Instruments: COS/NUV, COS/FUV

Special Requirements: SCHED 100%

Diagnostics

(Visit 01) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE.

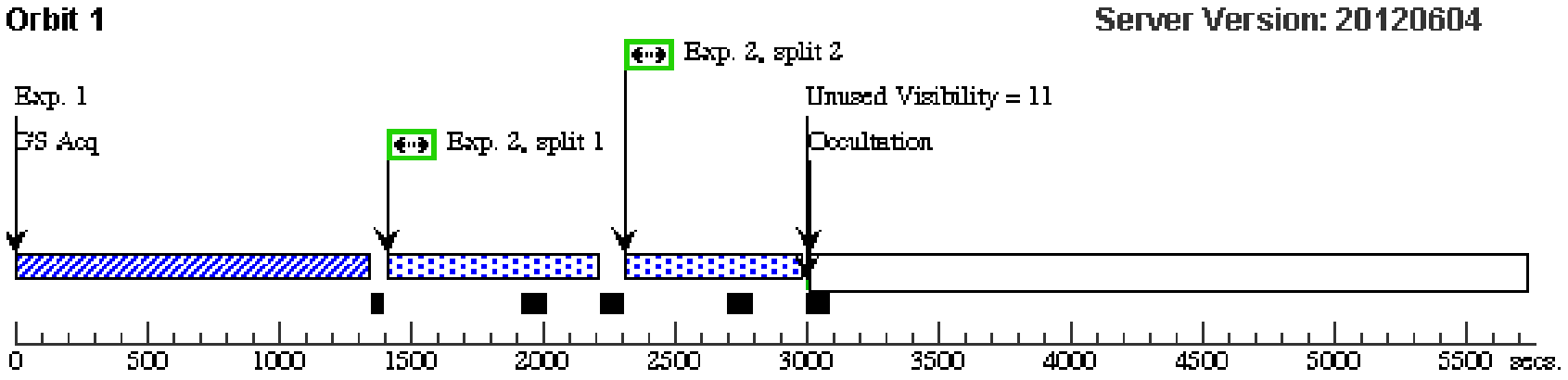
Fixed Targets

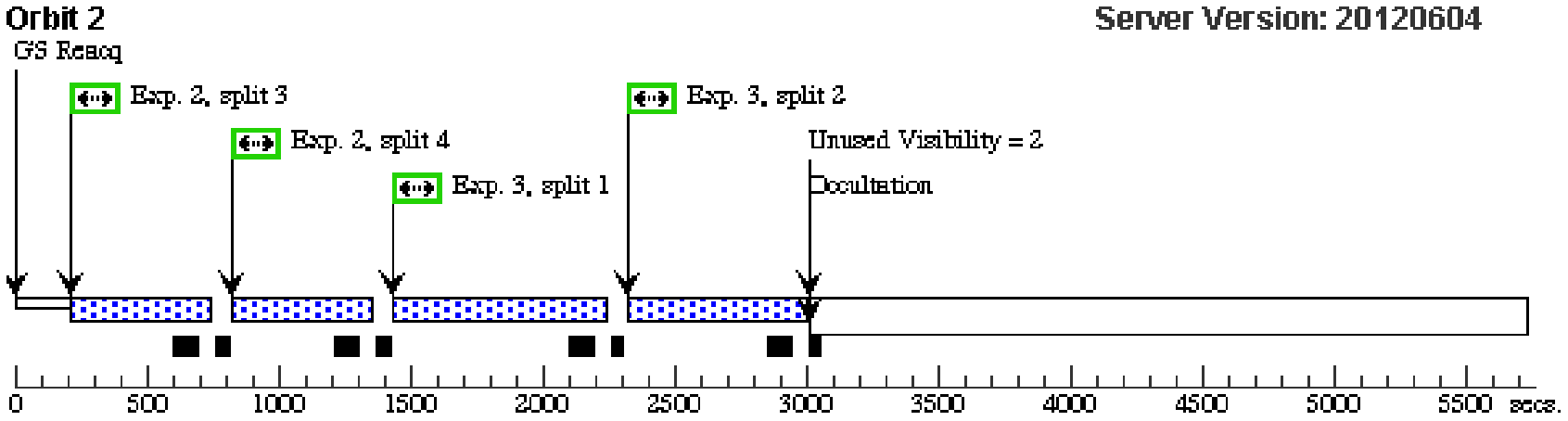
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(1)	GP0303-0759	RA: 03 03 21.4142 (45.8392258d) Dec: -07 59 23.25 (-7.98979d) Equinox: J2000		V=19.4+/-0.1 mFUV = 19.6 AB	Reference Frame: ICRS

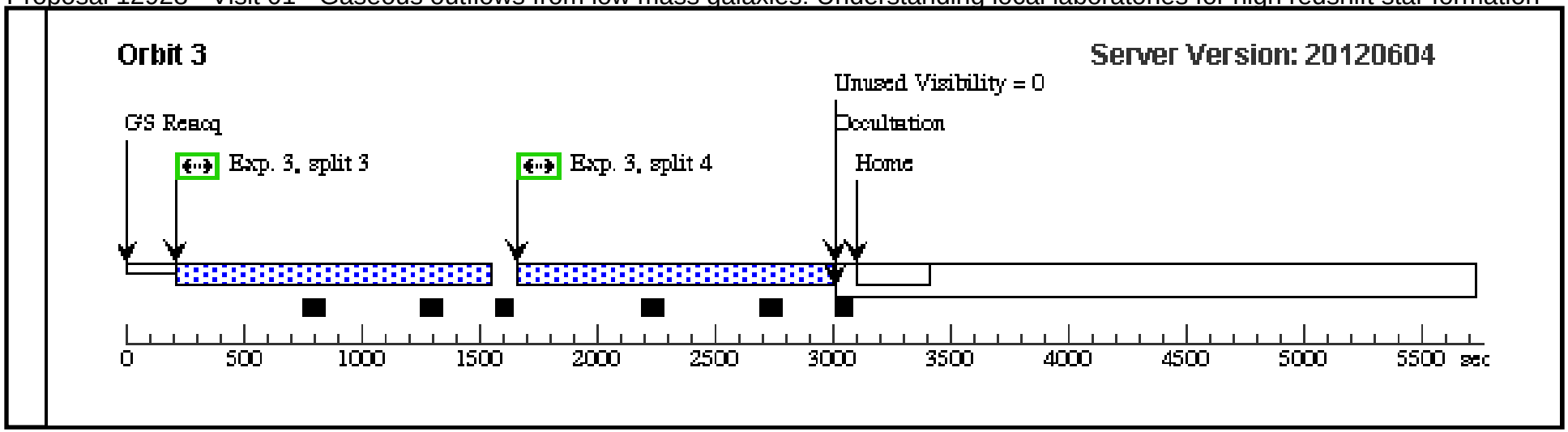
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	TA-1 (COS.ta.409106)	(1) GP0303-0759	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				470 Secs *[==>]*	*[1]*
2	Science-1-G130 (COS.sp.409146)	(1) GP0303-0759	COS/FUV, TIME-TAG, PSA	G130M 1291 A	FP-POS=ALL; EXTENDED=YES; FLASH=YES; SEGMENT=BOTH; BUFFER-TIME=350			450 Secs *[==>619.0 Secs (Split 1)]* *[==>619.0 Secs (Split 2)]* *[==>476.0 Secs (Split 3)]* *[==>476.0 Secs (Split 4)]*	*[1]* *[2]*
3	Science-1-G160 (COS.sp.411106)	(1) GP0303-0759	COS/FUV, TIME-TAG, PSA	G160M 1589 A	BUFFER-TIME=500; EXTENDED=YES; FLASH=YES; FP-POS=ALL; SEGMENT=BOTH			600 Secs *[==>626.0 Secs (Split 1)]* *[==>626.0 Secs (Split 2)]* *[==>1288.0 Secs (Split 3)]* *[==>1288.0 Secs (Split 4)]*	*[2]* *[3]*

Orbit Structure






Orbit 3
Server Version: 20120604
Unused Visibility = 0
GS Reacq
Occultation
Exp. 3, split 3
Exp. 3, split 4
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4000
4500
5000
5500
sec

Visit

Proposal 12928, Visit 02, implementation Wed Jul 04 02:58:26 GMT 2012

Diagnostic Status: Warning

Scientific Instruments: COS/NUV, COS/FUV

Special Requirements: SCHED 100%

Diagnostics

(Visit 02) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE.

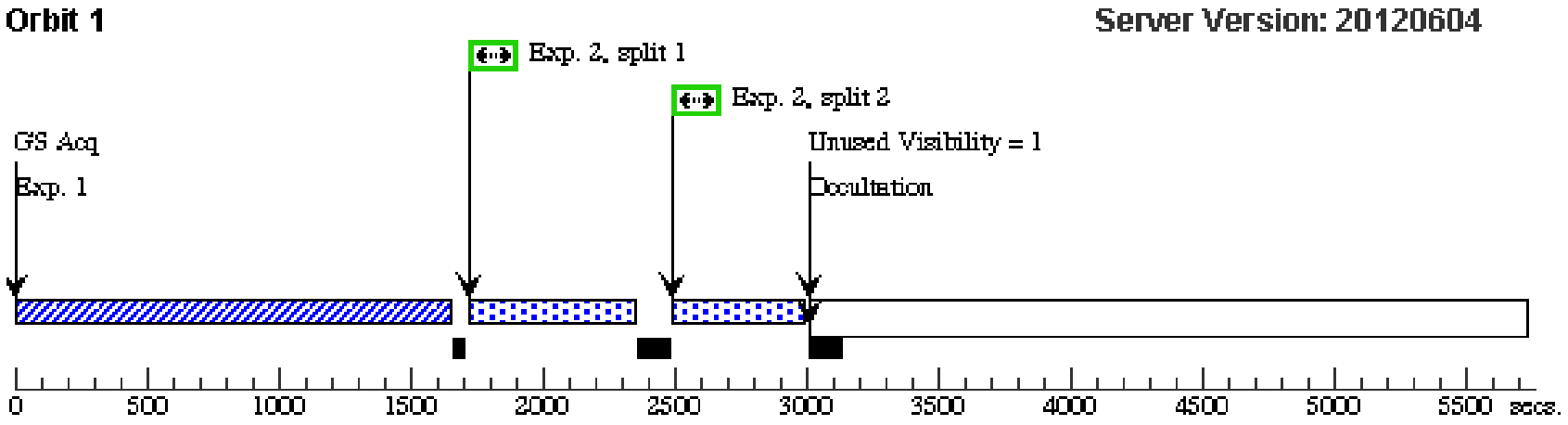
Fixed Targets

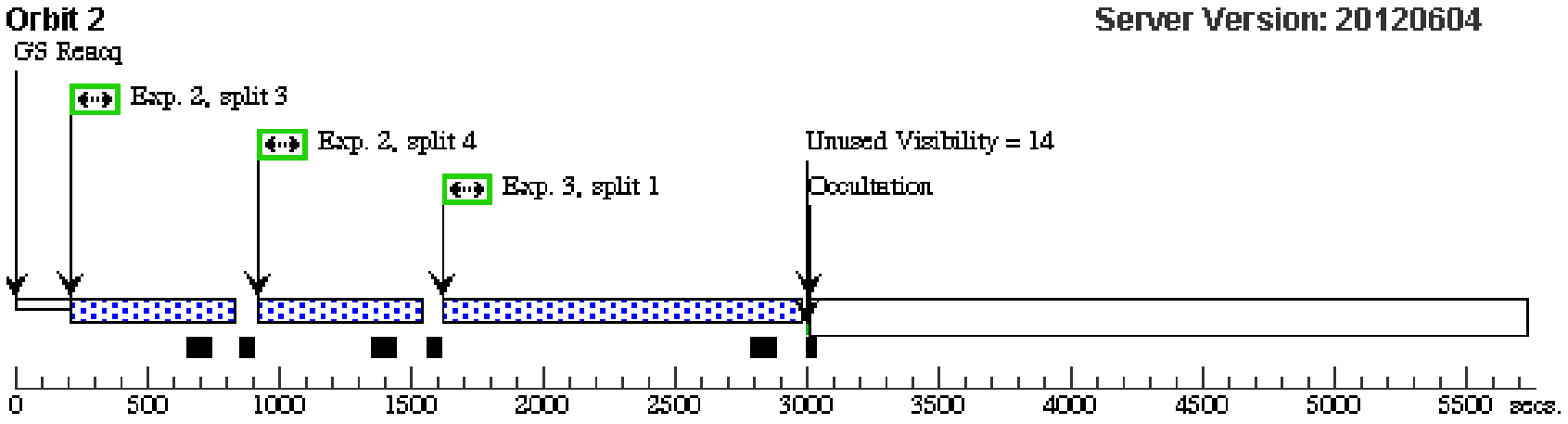
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(2)	GP1244+0216	RA: 12 44 23.3717 (191.0973821d) Dec: +02 15 40.43 (2.26123d) Equinox: J2000		V=19.2+/-0.1 mFUV = 19.9 AB	Reference Frame: ICRS

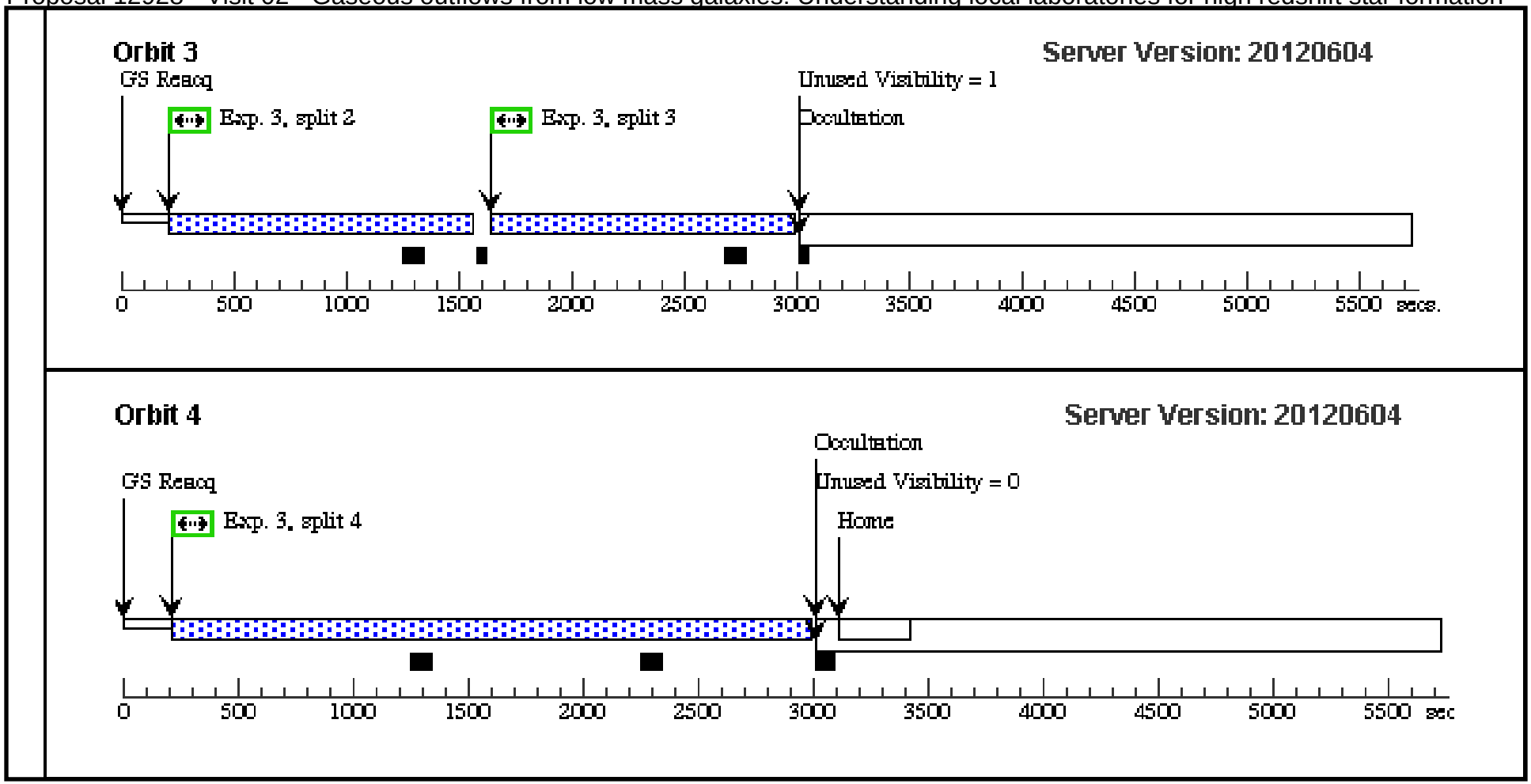
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	TA-2 (COS.ta.411239)	(2) GP1244+0216	COS/NUV, ACQ/IMAGE, PSA	MIRRORA		GS ACQ SCENARIO BASE1B3		625 Secs	
								[==>]	***[1]***
2	Science-2-G130 (COS.sp.411693)	(2) GP1244+0216	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=397; EXTENDED=YES; FLASH=YES; FP-POS=ALL; SEGMENT=BOTH			397 Secs	
								[==>450.0 Secs (Split 1)] *[==>450.0 Secs (Split 2)]*	***[1]***
								[==>571.0 Secs (Split 3)] *[==>571.0 Secs (Split 4)]*	***[2]***
3	Science-2-G160 (COS.sp.411262)	(2) GP1244+0216	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=1000; EXTENDED=YES; FLASH=YES; FP-POS=ALL; SEGMENT=BOTH			1000 Secs	
								[==>1174.0 Secs (Split 1)]	***[2]***
								[==>1302.0 Secs (Split 2)] *[==>1302.0 Secs (Split 3)]*	***[3]***
								[==>2729.0 Secs (Split 4)]	***[4]***

Orbit Structure






Orbit 3
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GS Reacq
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Exp. 3, split 3
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3000
3500
4000
4500
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5500
secs.
Orbit 4
Server Version: 20120604
Occultation
GS Reacq
Unused Visibility = 0
Exp. 3, split 4
Home
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500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12928, Visit 03, implementation Wed Jul 04 02:58:30 GMT 2012

Diagnostic Status: Warning

Scientific Instruments: COS/NUV, COS/FUV

Special Requirements: SCHED 100%

Diagnostics

(Visit 03) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE.

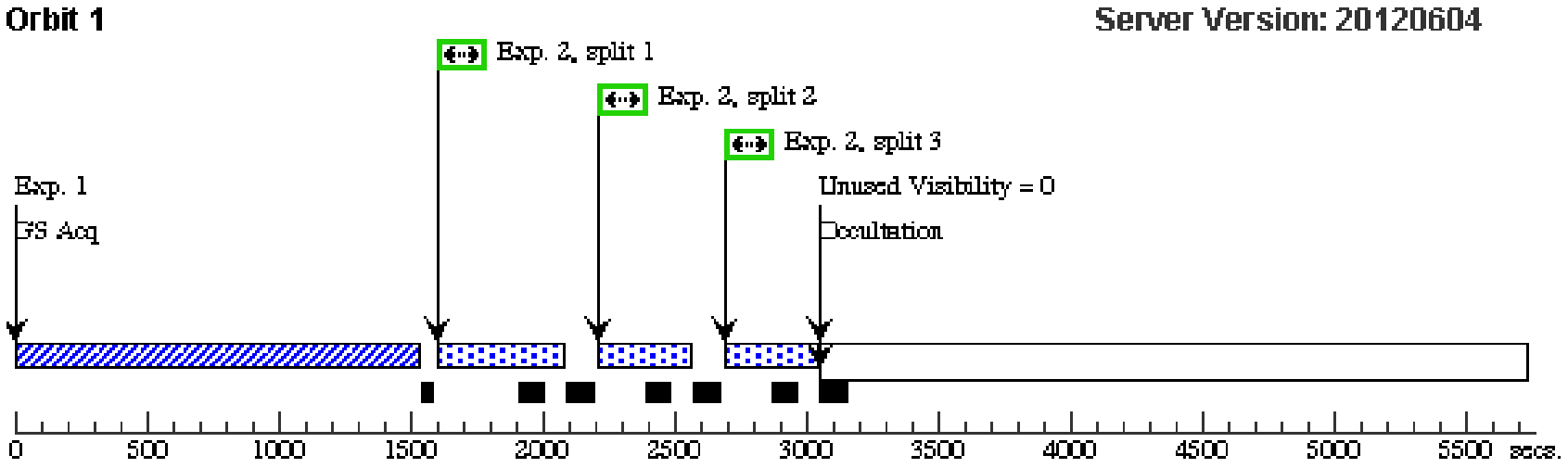
Fixed Targets

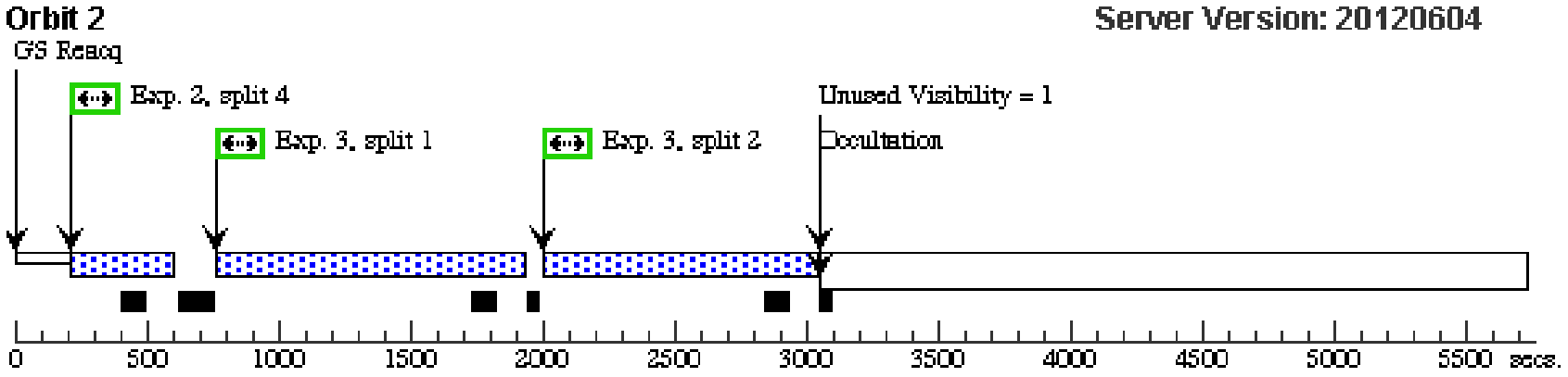
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(3)	GP1133+6514	RA: 11 33 3.8035 (173.2658479d) Dec: +65 13 41.38 (65.22816d) Equinox: J2000		V=20.0+/-0.1 mFUV = 19.7 AB	Reference Frame: ICRS

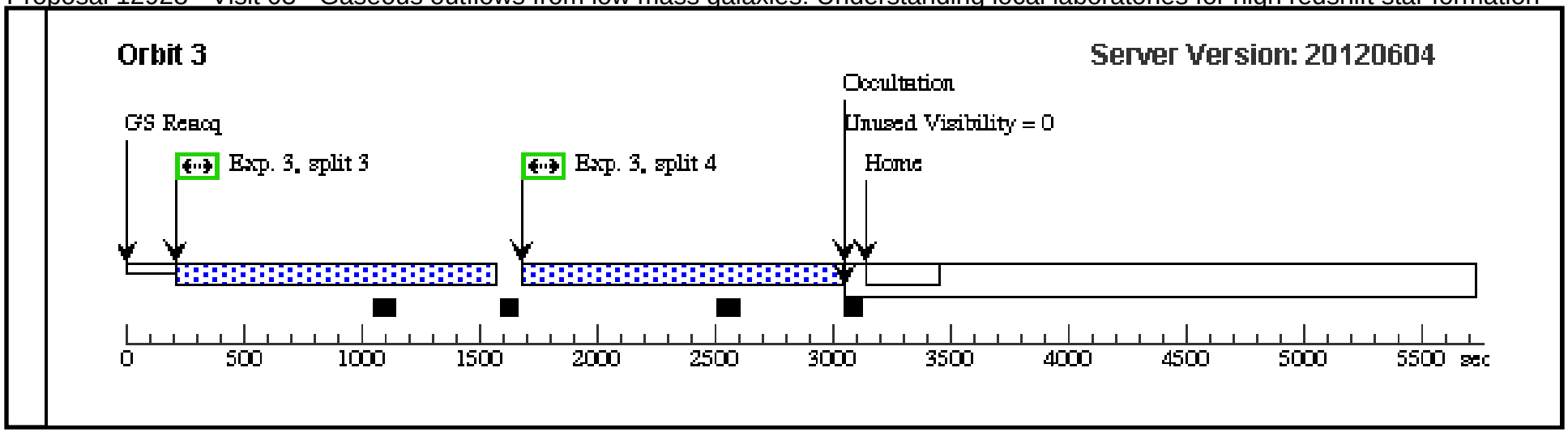
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	TA-3 (COS.ta.411283)	(3) GP1133+6514	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				567 Secs *[==>]*	*[1]*
2	Science-3-G130 (COS.sp.411284)	(3) GP1133+6514	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=1500; EXTENDED=YES; FLASH=YES; FP-POS=ALL; SEGMENT=BOTH			250 Secs *[==>299.0 Secs (Split 1)]* *[==>299.0 Secs (Split 2)]* *[==>299.0 Secs (Split 3)]* *[==>335.0 Secs (Split 4)]*	*[1]* *[2]*
3	Science-3-G160 (COS.sp.411287)	(3) GP1133+6514	COS/FUV, TIME-TAG, PSA	G160M 1600 A	BUFFER-TIME=800; EXTENDED=YES; FLASH=YES; FP-POS=ALL; SEGMENT=BOTH			900 Secs *[==>985.0 Secs (Split 1)]* *[==>985.0 Secs (Split 2)]* *[==>1309.0 Secs (Split 3)]* *[==>1309.0 Secs (Split 4)]*	*[2]* *[3]*

Orbit Structure






Orbit 3
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Exp. 3, split 4
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Visit

Proposal 12928, Visit 04, implementation Wed Jul 04 02:58:33 GMT 2012

Diagnostic Status: Warning

Scientific Instruments: COS/NUV, COS/FUV

Special Requirements: (none)

Diagnostics

(Visit 04) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE.

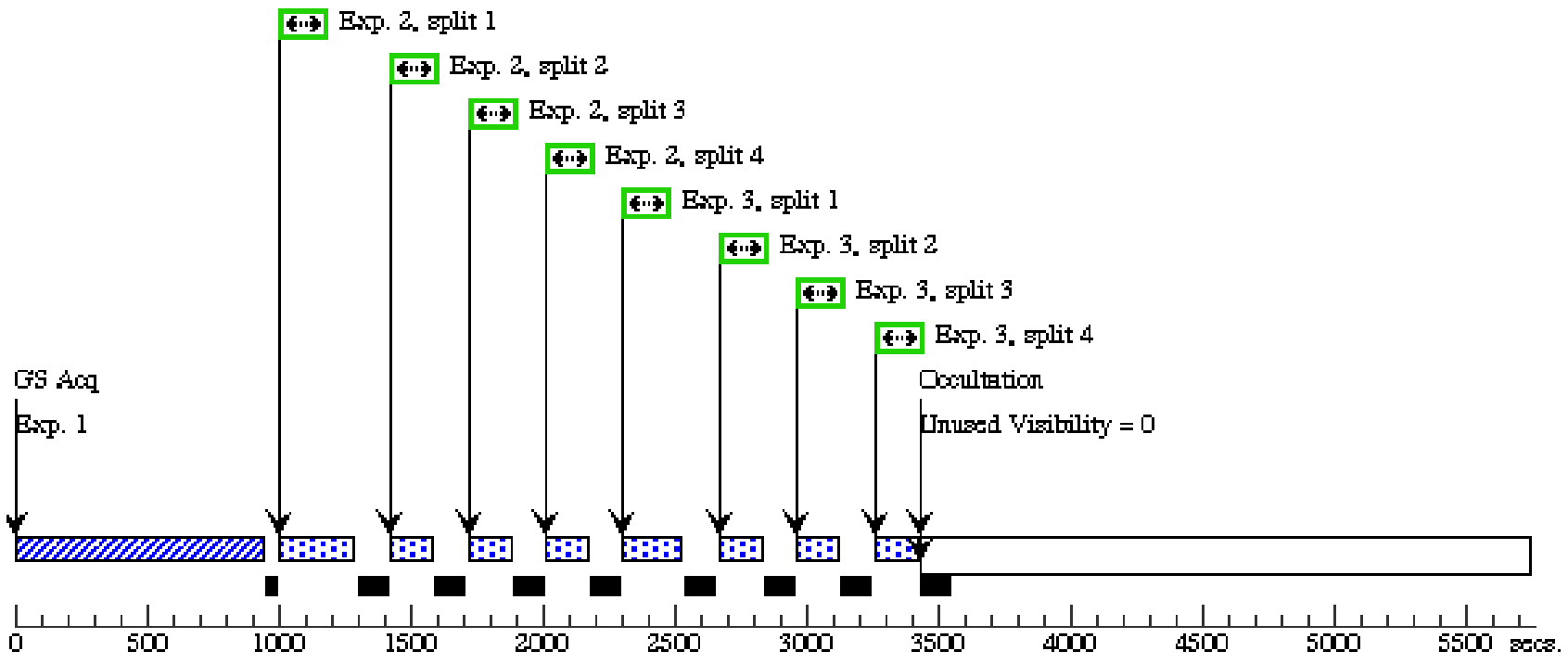
Fixed Targets

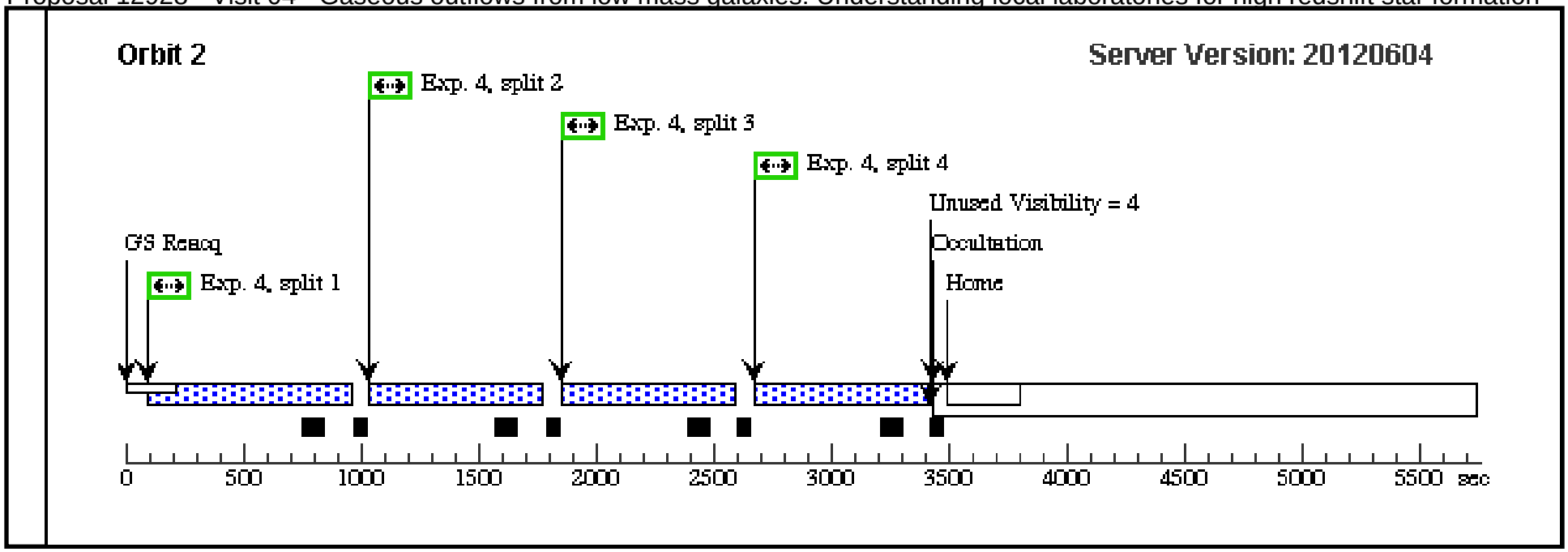
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(4)	GP1054+5238	RA: 10 53 30.8234 (163.3784308d) Dec: +52 37 52.87 (52.63135d) Equinox: J2000		V=18.8+/-0.1 mFUV = 19.2 AB	Reference Frame: ICRS

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	TA-4 (COS.ta.411291)	(4) GP1054+5238	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				268 Secs *[==>]*	***[1]***
2	Science-4-G130a (COS.sp.411294)	(4) GP1054+5238	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=1000; EXTENDED=YES; FLASH=YES; FP-POS=ALL; SEGMENT=BOTH			100 Secs *[==>103.0 Secs (Split 1)]* *[==>103.0 Secs (Split 2)]* *[==>103.0 Secs (Split 3)]* *[==>103.0 Secs (Split 4)]*	***[1]***
3	Science-4-G130b (COS.sp.411294)	(4) GP1054+5238	COS/FUV, TIME-TAG, PSA	G130M 1327 A	BUFFER-TIME=1000; EXTENDED=YES; FLASH=YES; FP-POS=ALL; SEGMENT=BOTH			100 Secs *[==>103.0 Secs (Split 1)]* *[==>103.0 Secs (Split 2)]* *[==>103.0 Secs (Split 3)]* *[==>103.0 Secs (Split 4)]*	***[1]***
4	Science-4-G160 (COCOS.sp.411296)	(4) GP1054+5238	COS/FUV, TIME-TAG, PSA	G160M 1611 A	BUFFER-TIME=500; EXTENDED=YES; FLASH=YES; FP-POS=ALL; SEGMENT=BOTH			500 Secs *[==>684.0 Secs (Split 1)]* *[==>684.0 Secs (Split 2)]* *[==>684.0 Secs (Split 3)]* *[==>684.0 Secs (Split 4)]*	***[2]***

Orbit Structure




Orbit 2
Server Version: 20120604
Exp. 4, split 2
Exp. 4, split 3
Exp. 4, split 4
Unused Visibility = 4
GS Reacq
Occultation
Exp. 4, split 1
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1500
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3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12928, Visit 05, implementation Wed Jul 04 02:58:35 GMT 2012

Diagnostic Status: Warning

Scientific Instruments: COS/NUV, COS/FUV

Special Requirements: (none)

Diagnostics

(Visit 05) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE.

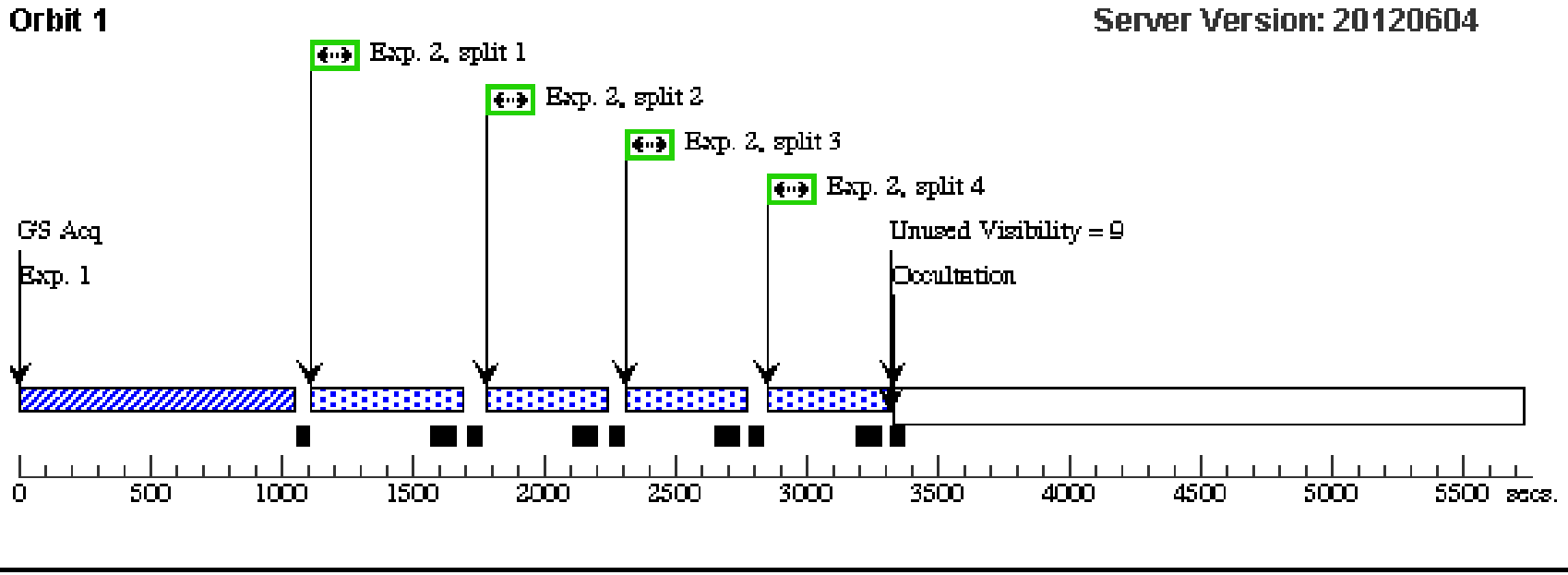
Fixed Targets

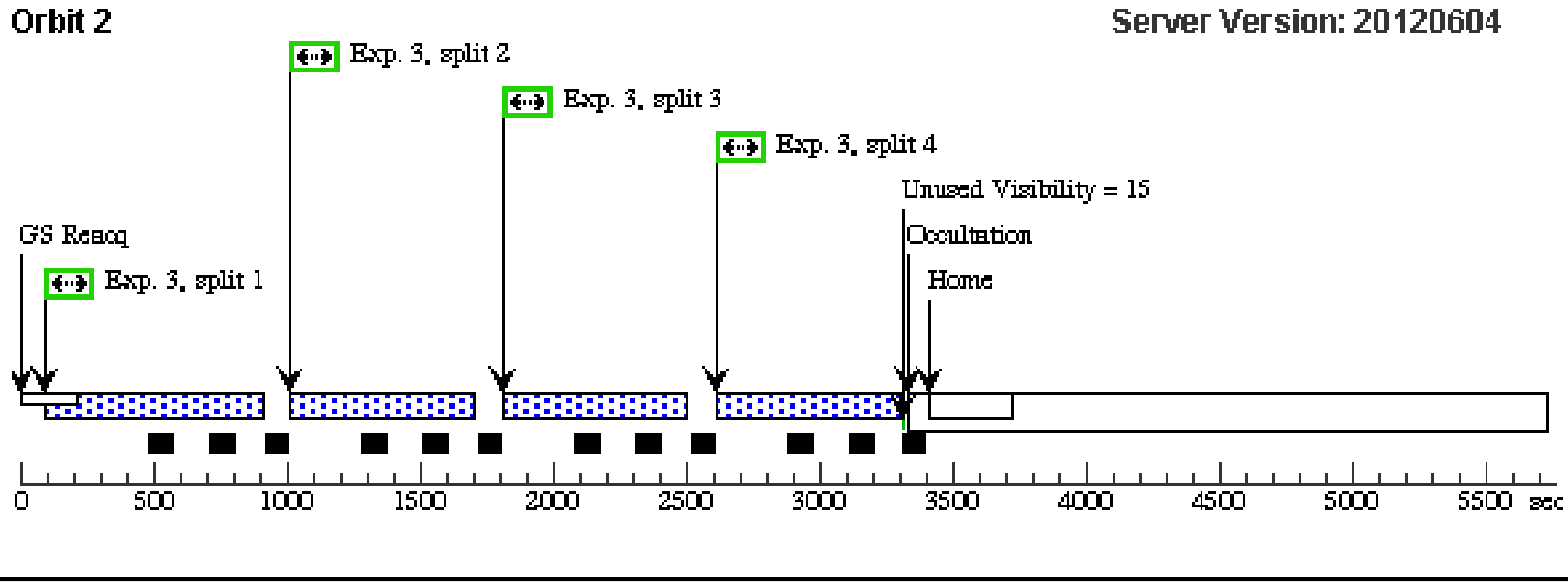
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(5)	GP1424+4217	RA: 14 24 5.7283 (216.0238679d) Dec: +42 16 46.29 (42.27952d) Equinox: J2000		V=19.0+/-0.1 mFUV = 19.1 AB	Reference Frame: ICRS

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	(COS.ta.411305)	(5) GP1424+4217	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				323 Secs *[==>]*	*[1]*
2	Science-5-G130 (COS.sp.411308)	(5) GP1424+4217	COS/FUV, TIME-TAG, PSA	G130M 1300 A	BUFFER-TIME=3000; EXTENDED=YES; FLASH=YES; FP-POS=ALL; SEGMENT=BOTH			300 Secs *[==>403.0 Secs (Split 1)]* *[==>403.0 Secs (Split 2)]* *[==>403.0 Secs (Split 3)]* *[==>403.0 Secs (Split 4)]*	*[1]*
3	Science-5-G160 (COS.sp.411312)	(5) GP1424+4217	COS/FUV, TIME-TAG, PSA	G160M 1611 A	BUFFER-TIME=229; EXTENDED=YES; FLASH=YES; FP-POS=ALL; SEGMENT=BOTH			329 Secs *[==>636.0 Secs (Split 1)]* *[==>636.0 Secs (Split 2)]* *[==>636.0 Secs (Split 3)]* *[==>636.0 Secs (Split 4)]*	*[2]*

Orbit Structure





Visit

Proposal 12928, Visit 06, implementation Wed Jul 04 02:58:37 GMT 2012

Diagnostic Status: Warning

Scientific Instruments: COS/NUV, COS/FUV

Special Requirements: SCHED 100%

Diagnostics

(Visit 06) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE.

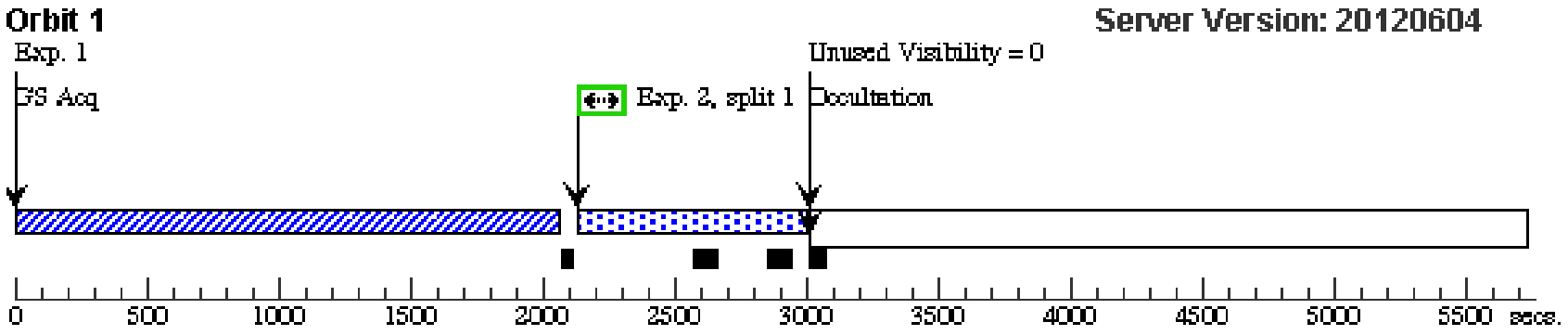
Fixed Targets

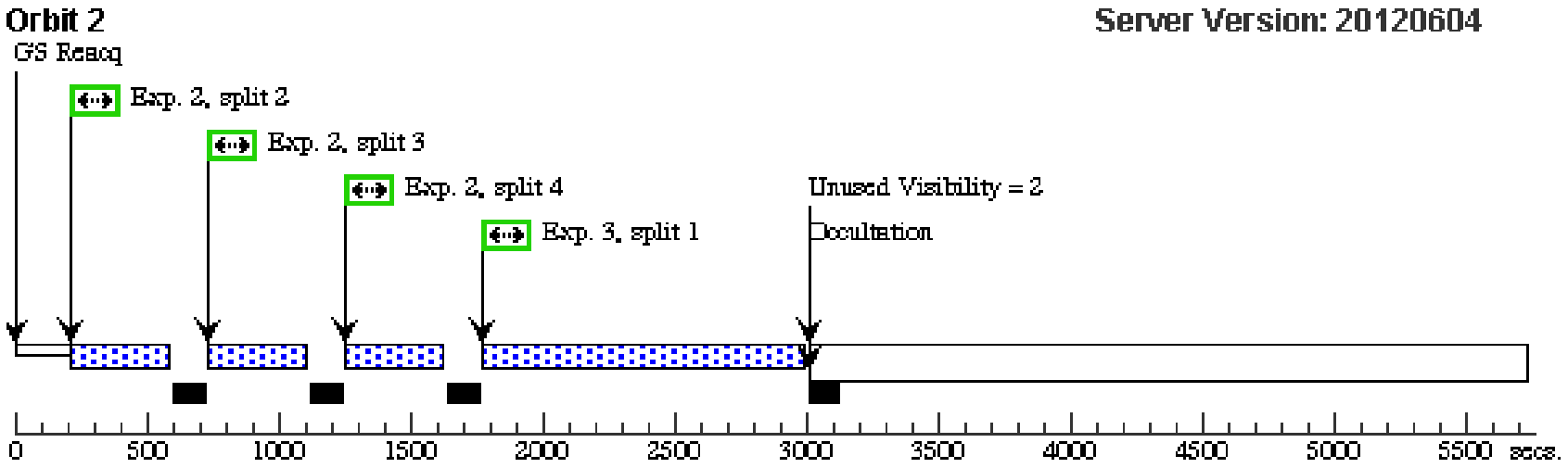
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(6)	GP1249+1234	RA: 12 48 34.6344 (192.1443100d) Dec: +12 34 2.93 (12.56748d) Equinox: J2000		V=19.9+/-0.1 mFUV = 19.9 AB	Reference Frame: ICRS

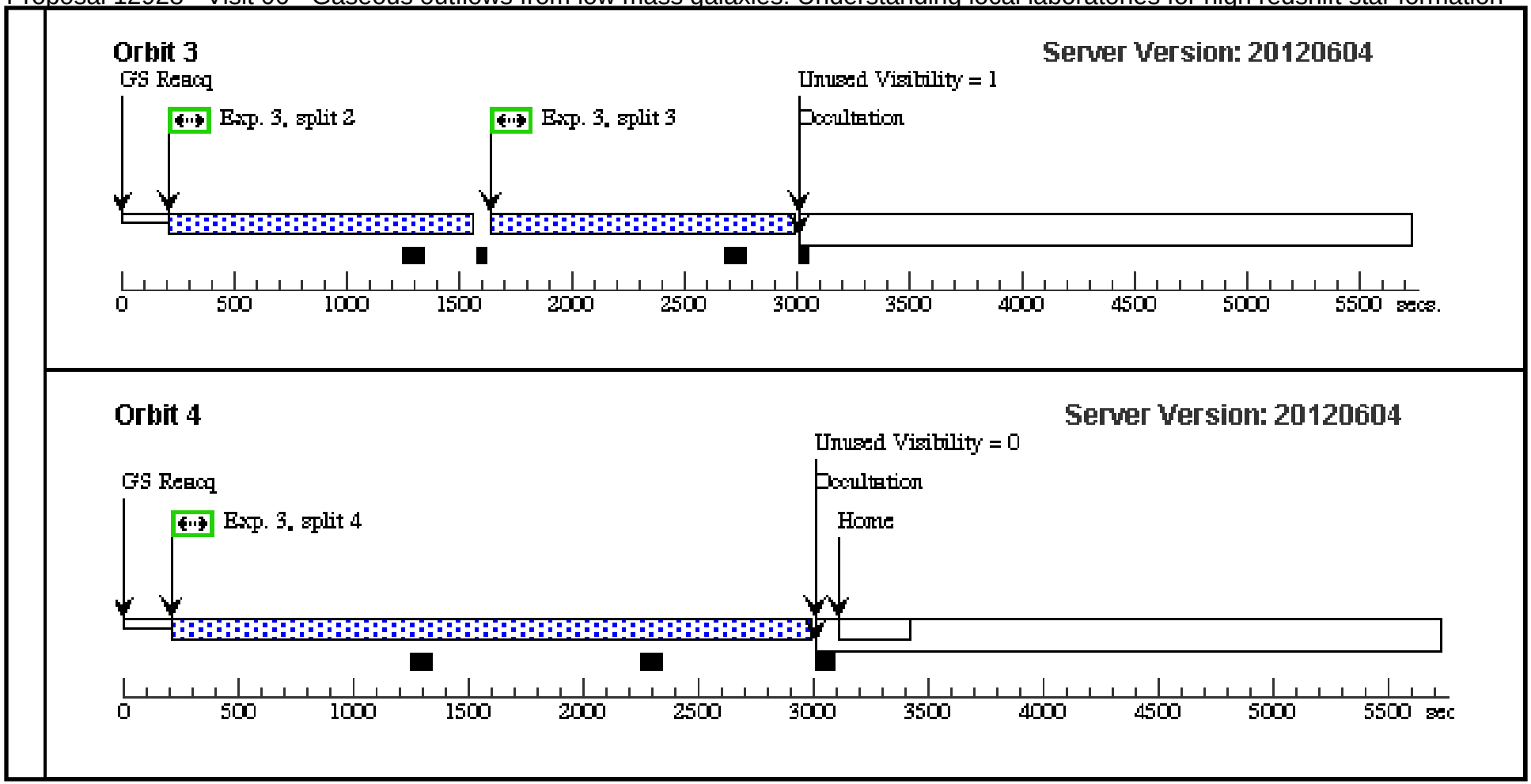
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	TA-6 (COS.ta.411318)	(6) GP1249+1234	COS/NUV, ACQ/IMAGE, PSA	MIRRORA		GS ACQ SCENARIO BASE1B3		832 Secs *[==>]*	*[1]*
2	Science-6-G130 (COS.sp.411319)	(6) GP1249+1234	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=2800; EXTENDED=YES; FLASH=YES; SEGMENT=BOTH; FP-POS=ALL			280 Secs *[==>687.0 Secs (Split 1)]* *[==>319.0 Secs (Split 2)]* *[==>319.0 Secs (Split 3)]* *[==>319.0 Secs (Split 4)]*	*[1]* *[2]*
3	Science-6-G160 (COS.sp.411321)	(6) GP1249+1234	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=1000; EXTENDED=YES; FLASH=YES; SEGMENT=BOTH; FP-POS=ALL			1000 Secs *[==>1039.0 Secs (Split 1)]* *[==>1302.0 Secs (Split 2)]* *[==>1302.0 Secs (Split 3)]* *[==>2729.0 Secs (Split 4)]*	*[2]* *[3]* *[4]*

Orbit Structure






Orbit 3
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GS Reacq
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Exp. 3, split 3
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Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 4
Server Version: 20120604
Unused Visibility = 0
GS Reacq
Exp. 3, split 4
Occultation
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec

Visit

Proposal 12928, Visit 07, implementation Wed Jul 04 02:58:40 GMT 2012

Diagnostic Status: Warning

Scientific Instruments: COS/NUV, COS/FUV

Special Requirements: SCHED 100%

Diagnostics

(Visit 07) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE.

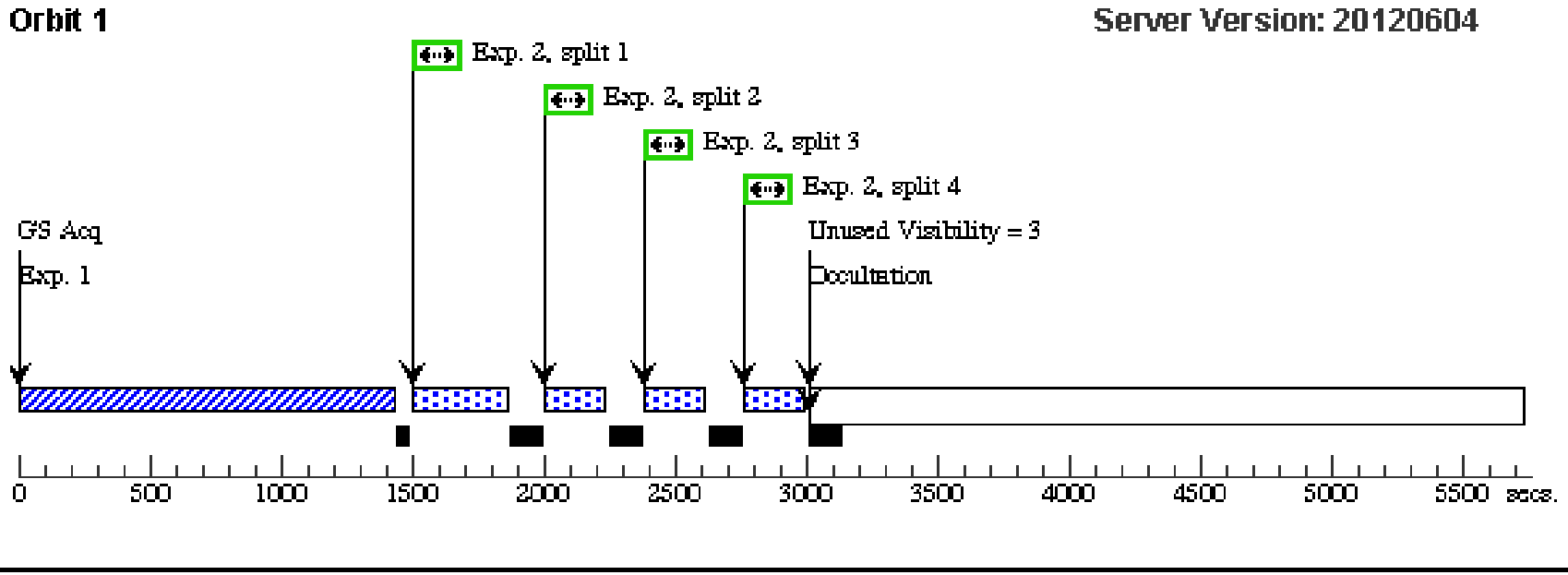
Fixed Targets

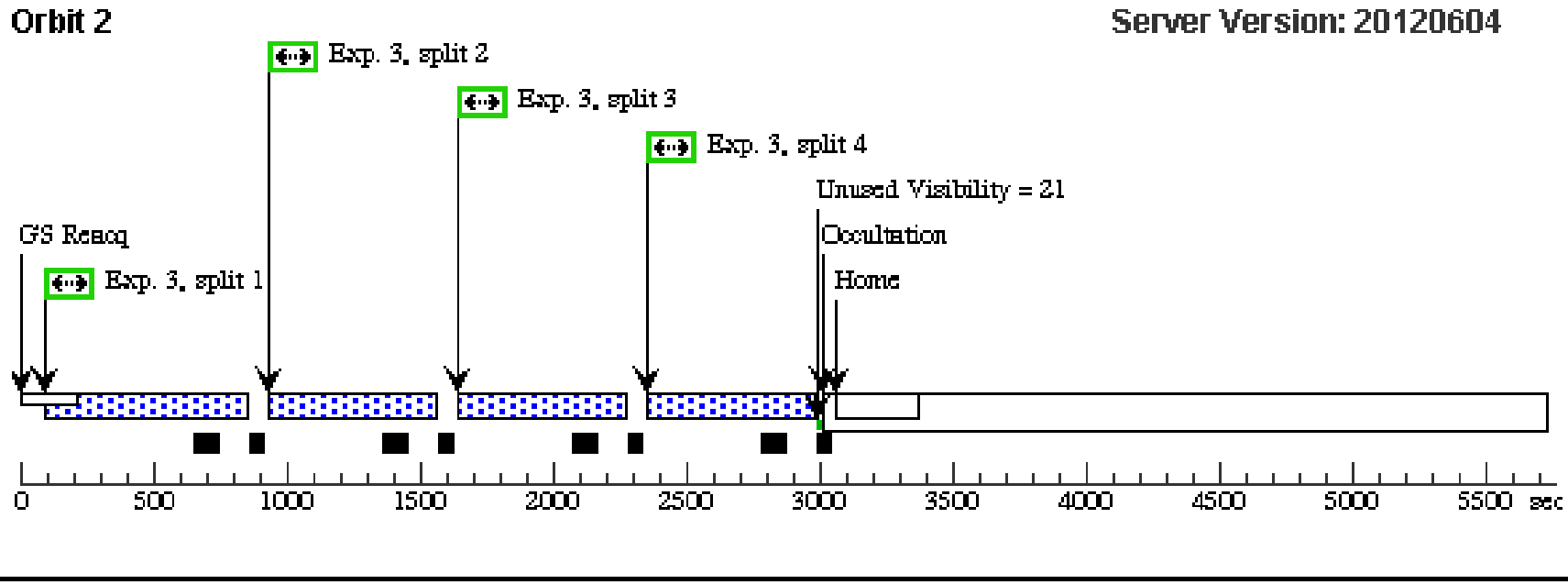
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(7)	GP1219+1526	RA: 12 19 3.9838 (184.7665992d) Dec: +15 26 8.51 (15.43570d) Equinox: J2000		V=19.5+/-0.1 mFUV = 19.3 AB	Reference Frame: ICRS

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	TA-7 (COS.ta.411326)	(7) GP1219+1526	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				516 Secs *[==>]*	*[1]*
2	Science-7-G130 (COS.sp.411797)	(7) GP1219+1526	COS/FUV, TIME-TAG, PSA	G130M 1309 A	BUFFER-TIME=1500; EXTENDED=YES; FLASH=YES; SEGMENT=BOTH; FP-POS=ALL			150 Secs *[==>179.0 Secs (Split 1)]* *[==>179.0 Secs (Split 2)]* *[==>179.0 Secs (Split 3)]* *[==>179.0 Secs (Split 4)]*	*[1]*
3	Science-7-G160 (COS.sp.411321)	(7) GP1219+1526	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=400; EXTENDED=YES; FLASH=YES; SEGMENT=BOTH; FP-POS=ALL			500 Secs *[==>576.0 Secs (Split 1)]* *[==>576.0 Secs (Split 2)]* *[==>576.0 Secs (Split 3)]* *[==>576.0 Secs (Split 4)]*	*[2]*

Orbit Structure





Visit

Proposal 12928, Visit 08, implementation Wed Jul 04 02:58:42 GMT 2012

Diagnostic Status: Warning

Scientific Instruments: COS/NUV, COS/FUV

Special Requirements: SCHED 100%

Diagnostics

(Visit 08) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE.

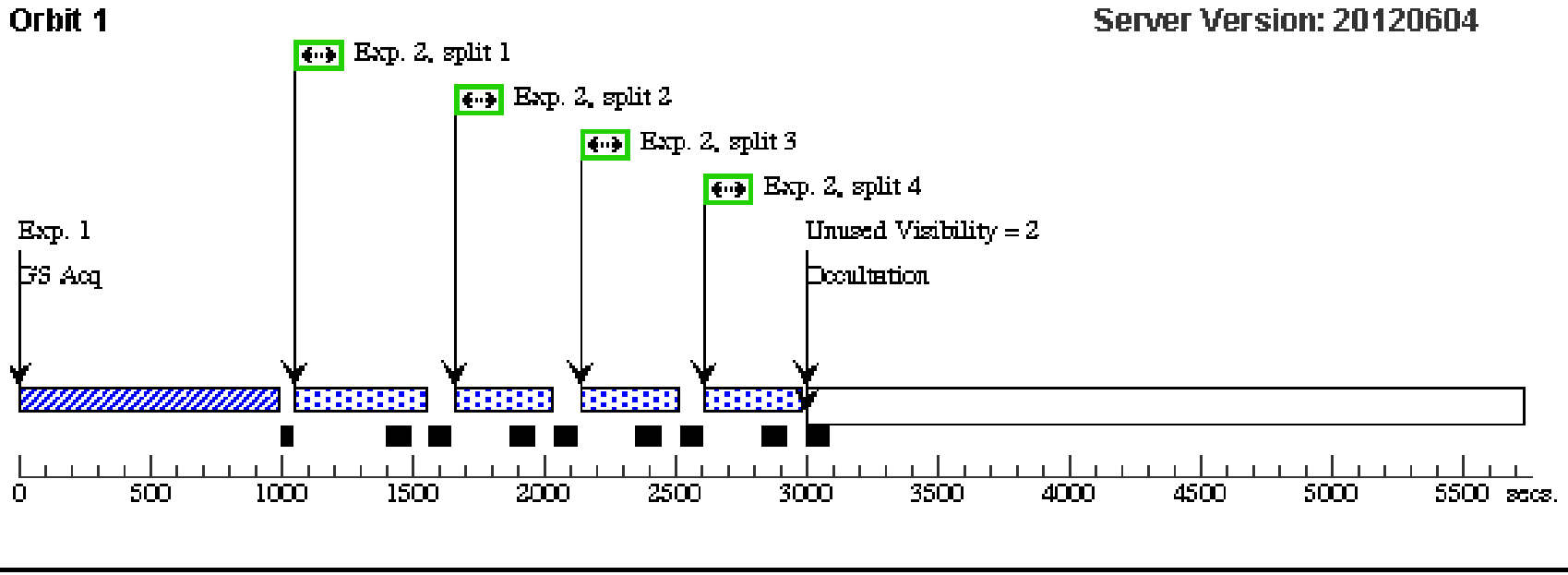
Fixed Targets

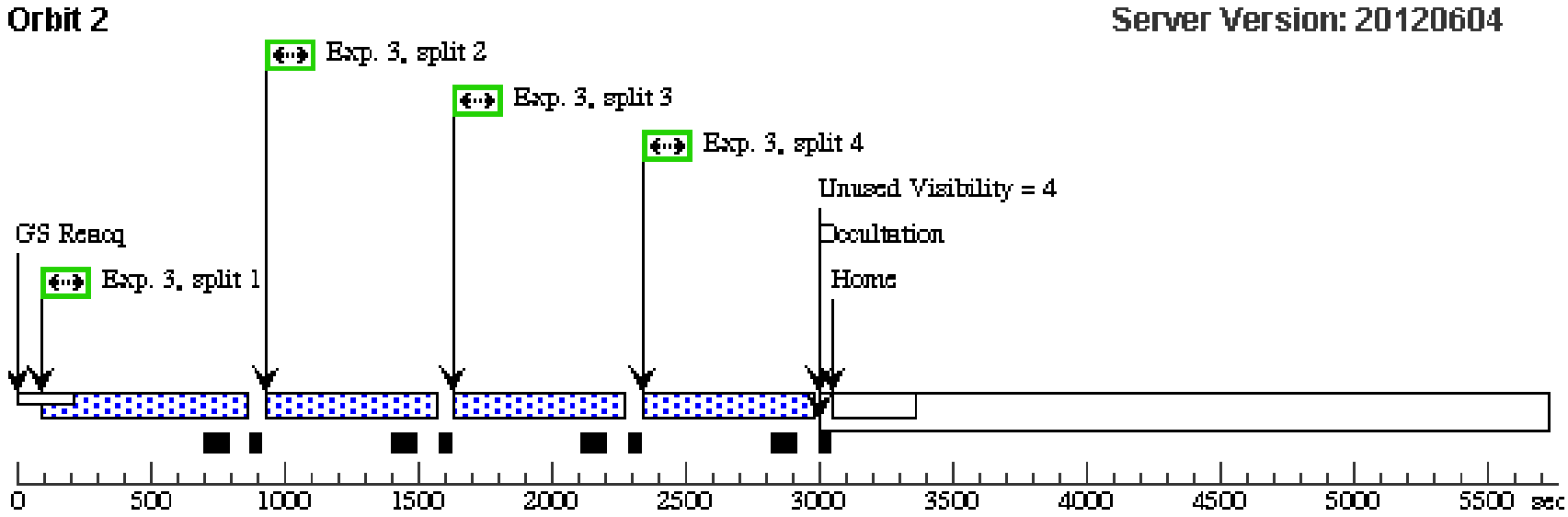
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(8)	GP1137+3524	RA: 11 37 22.1398 (174.3422492d) Dec: +35 24 26.69 (35.40741d) Equinox: J2000		V=18.9+/-0.1 mFUV = 19.3AB	Reference Frame: ICRS

Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	TA-8 (COS.ta.411336)	(8) GP1137+3524	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				294 Secs *[==>]*	*[1]*
2	Science-8-G130 (COS.sp.411339)	(8) GP1137+3524	COS/FUV, TIME-TAG, PSA	G130M 1309 A	BUFFER-TIME=180; EXTENDED=YES; FLASH=YES; SEGMENT=BOTH; FP-POS=ALL			180 Secs *[==>316.0 Secs (Split 1)]* *[==>316.0 Secs (Split 2)]* *[==>316.0 Secs (Split 3)]* *[==>316.0 Secs (Split 4)]*	*[1]*
3	Science-8-G160 (COS.sp.411340)	(8) GP1137+3524	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=443; EXTENDED=YES; FLASH=YES; SEGMENT=BOTH; FP-POS=ALL			443 Secs *[==>585.0 Secs (Split 1)]* *[==>585.0 Secs (Split 2)]* *[==>585.0 Secs (Split 3)]* *[==>585.0 Secs (Split 4)]*	*[2]*

Orbit Structure





Visit

Proposal 12928, Visit 09, implementation Wed Jul 04 02:58:44 GMT 2012

Diagnostic Status: Warning

Scientific Instruments: COS/NUV, COS/FUV

Special Requirements: SCHED 100%

Diagnostics

(Visit 09) Warning (Form): If the target coordinates are not known to 0.4" (or better) an ACQ/SEARCH should precede the ACQ/IMAGE.

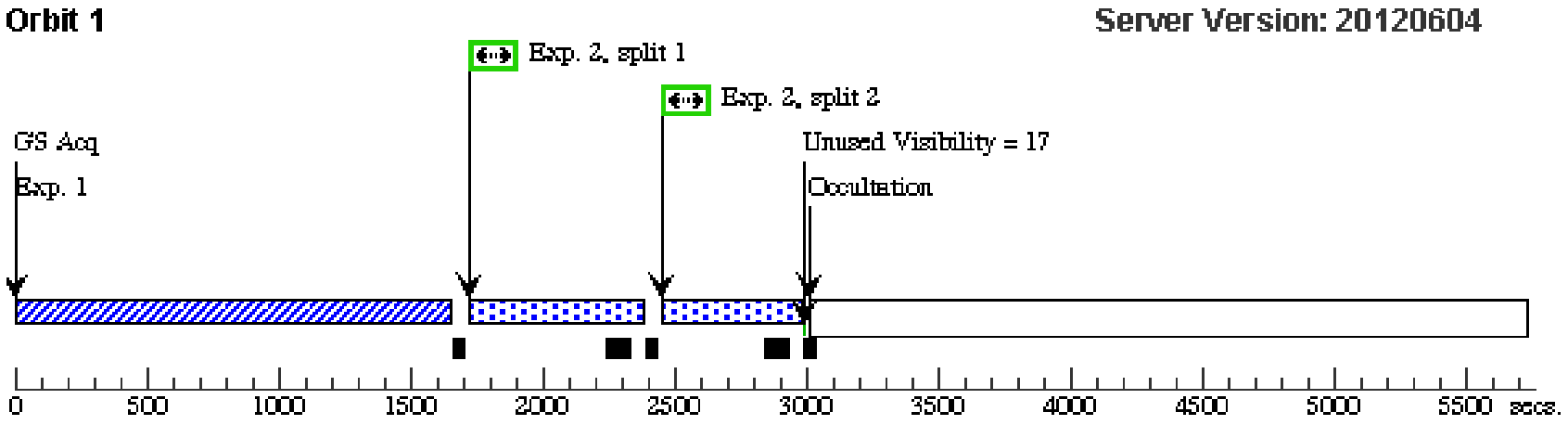
Fixed Targets

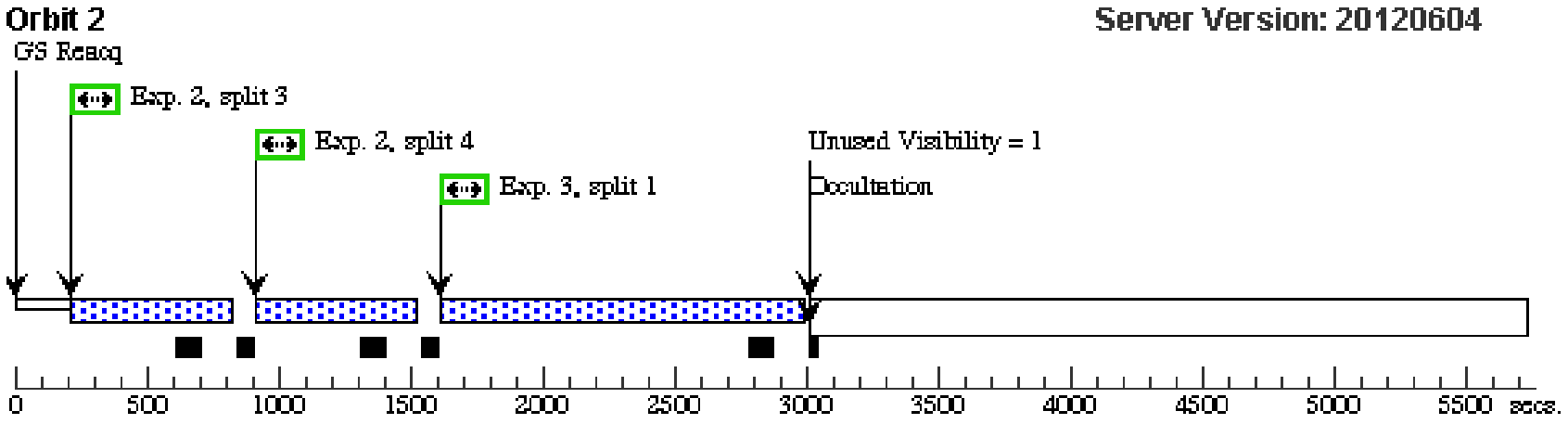
#	Name	Target Coordinates	Targ. Coord. Corrections	Fluxes	Miscellaneous
(9)	GP0911+1831	RA: 09 11 13.3450 (137.8056042d) Dec: +18 31 8.17 (18.51894d) Equinox: J2000		V=19.5+/-0.1 mFUV = 19.8 AB	Reference Frame: ICRS

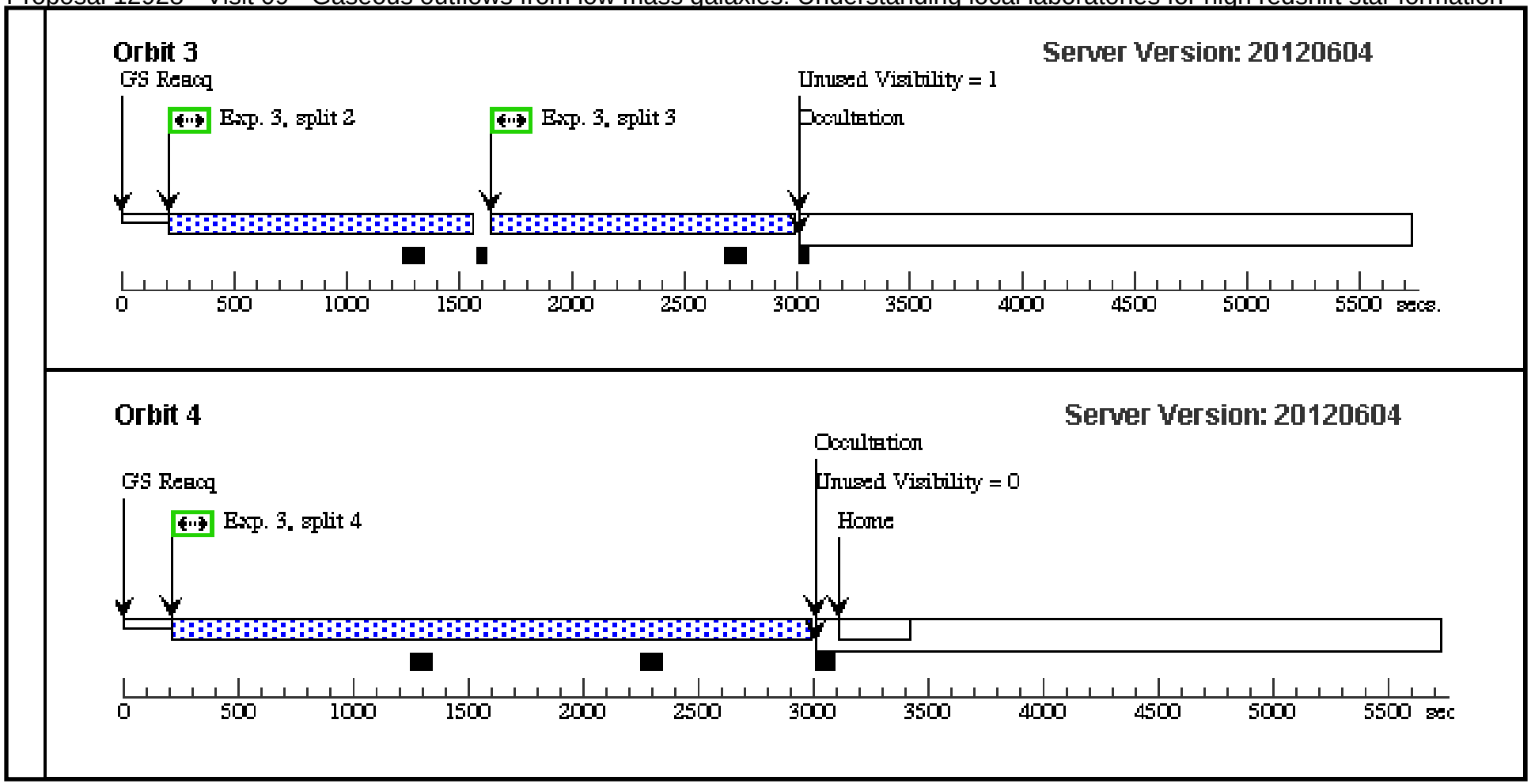
Exposures

#	Label (ETC Run)	Target	Config,Mode,Aperture	Spectral Els.	Opt. Params.	Special Reqs.	Groups	Exp. Time/[Actual Dur.]	Orbit
1	TA-9 (COS.ta.411341)	(9) GP0911+1831	COS/NUV, ACQ/IMAGE, PSA	MIRRORA				625 Secs	
								[==>]	***[1]***
2	Science-9-G130 (COS.sp.411343)	(9) GP0911+1831	COS/FUV, TIME-TAG, PSA	G130M 1291 A	BUFFER-TIME=3600; EXTENDED=YES; FLASH=YES; SEGMENT=BOTH; FP-POS=ALL			360 Secs	
								[==>480.0 Secs (Split 1)] *[==>480.0 Secs (Split 2)]*	***[1]***
								[==>557.0 Secs (Split 3)] *[==>557.0 Secs (Split 4)]*	***[2]***
3	Science-9-G160 (COS.sp.411344)	(9) GP0911+1831	COS/FUV, TIME-TAG, PSA	G160M 1623 A	BUFFER-TIME=1000; EXTENDED=YES; FLASH=YES; SEGMENT=BOTH; FP-POS=ALL			1000 Secs	
								[==>1197.0 Secs (Split 1)]	***[2]***
								[==>1302.0 Secs (Split 2)] *[==>1302.0 Secs (Split 3)]*	***[3]***
								[==>2729.0 Secs (Split 4)]	***[4]***

Orbit Structure






Orbit 3
Server Version: 20120604
GS Reacq
Exp. 3, split 2
Exp. 3, split 3
Unused Visibility = 1
Occultation
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
secs.
Orbit 4
Server Version: 20120604
Occultation
GS Reacq
Unused Visibility = 0
Exp. 3, split 4
Home
0
500
1000
1500
2000
2500
3000
3500
4000
4500
5000
5500
sec